

Claims

1. Stop module (8) for delimiting the pivot motion of a rotation body (14) which is pivotably disposed in a housing (10), comprising a catch (26) on the side of the rotation body, which follows the trajectory of the pivot motion, and a stop (48, 50) on the housing side, comprising a damping element (54) for delimiting the motion of the catch (26), wherein the stop is in the circular or circular segment-shaped trajectory (60) of the catch (26), characterized in that at least one spherical intermediate element (56) is provided between the catch (26) and the stop (48, 50), which is at least largely freely guided along the trajectory (60) of the catch (26) in a substantially annular groove-like recess (32, 38), wherein the intermediate element (56) is supported on the housing and also on the stop (48, 50) when the catch (26) impinges.
2. Stop module (8) according to claim 1, characterized in that the intermediate element (56) is designed such that the forces exerted by the intermediate element (56) onto the stop (48, 50) are transmitted at least largely without transverse forces (Q).
3. Stop module (8) according to claim 1 or 2, characterized in that several free running intermediate elements (56) are provided, which are disposed next to each other.
4. Stop module (8) according to claim 3, characterized in that all intermediate elements (56) have an identical design.
5. Stop module (8) according to any one of the preceding claims, characterized in that the intermediate element (56) or the intermediate elements are/is guided, in the direct vicinity before the

stop, on a path extending tangentially to the trajectory (60) of the catch and in axial extension of the stop (48, 50).

6. Stop module (8) according to any one of the preceding claims, characterized in that the housing (10) is designed such that the number of intermediate elements (56) can be changed to adjust the pivot angle.
7. Stop module (8) according to any one of the preceding claims, characterized in that the stop (48, 50) or the stops is/are adjustably disposed on the housing (10) to adjust the pivot angle.
8. Stop module (8) according to any one of the preceding claims, characterized in that two stops (48, 50) are provided in the trajectory (60) of the catch for delimiting the pivot motion in both directions.
9. Stop module (8) according to any one of the preceding claims, characterized in that the stop (48, 50) has a fixed stop (52) and a damper (54), wherein the damper (54) damps the motion of the catch (26) before the catch impinges on the fixed stop (52).
10. Stop module (8) according to claim 9, characterized in that the damper (54) is an elastically resilient plastic material, in particular an elastomeric material, or a piston rod (62) of a damping piston.
11. Stop module (8) according to claim 9 or 10, characterized in that the fixed stop (52) surrounds the damper (54, 62) like a sleeve, wherein the damper (54, 62) projects past the fixed stop in an axial direction.

12. Pivot unit comprising a stop module (8) according to any one of the preceding claims.